Edison Electric
INSTITUTE

Power by Association

October 5, 2017

Mr. Christopher Lieske
Office of Transportation and Air Quality
Assessment and Standards Division
Environmental Protection Agency
2000 Traverwood Drive
Ann Arbor, MI 48105

Ms. Rebecca Schade
Office of the Chief Counsel
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE
Washington, D.C. 20590

Re: Docket No. EPA-HQ-OAR-2015-0827

Dear Mr. Lieske and Ms. Schade,

The Edison Electric Institute (EEI) appreciates the opportunity to comment on the *Request for Comment on Reconsideration of the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles; Request for Comment on Model Year 2021 Greenhouse Gas Emissions Standards*, which was made available for comment on August 21, 2017. *See* 82 *Fed. Reg.* 39,551 (Aug. 21, 2017).

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. Many of EEI's members are actively involved in the development of the regulations, financial incentives and infrastructure needed to commercially deploy electric vehicles and plug-in hybrid electric vehicles. EEI's comments are primarily focused on the items relating to electric vehicles in the reconsideration. Electrification remains the best, most impactful and most cost-effective pathway to reducing emissions from the transportation sector.

If you have any questions about these comments, please contact me at abond@eei.org, or at 202-508-5523.

Sincerely,

Alex Bond
Associate General Counsel, Energy & Environment

COMMENTS OF THE EDISON ELECTRIC INSTITUTE ON THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION AND ENVIRONMENTAL PROTECTION AGENCY'S RECONSIDERATION OF THE MID-TERM EVALUATION OF GREENHOUSE GAS EMISSIONS STANDARDS FOR MODEL YEAR 2022-2025 LIGHT DUTY VEHICLES; REQUEST FOR COMMENT ON MODEL YEAR 2021 GREENHOUSE GAS EMISSIONS STANDARDS

Docket No. EPA-HQ-OAR-2015-0827

October 5, 2017

The Edison Electric Institute (EEI) appreciates the opportunity to submit comments on the Environmental Protection Agency (EPA) and National Highway Traffic Safety Administration (NHTSA) reconsideration of the final determination of the mid-term evaluation of greenhouse gas (GHG) emissions standards for Model Year (MY) 2022-2025 light duty vehicles, including comments on the appropriateness of MY 2021 GHG emissions standards (Reconsideration or Mid-Term Evaluation). *See Request for Comment on Reconsideration of the Final Determination of the Mid-Term Evaluation of Greenhouse Gas Emissions Standards for Model Year 2022-2025 Light-Duty Vehicles; Request for Comment on Model Year 2021 Greenhouse Gas Emissions Standards*, 82 *Fed. Reg.* 39,551 (Aug. 21, 2017).

Both EPA and NHTSA (collectively, the Agencies) have announced their reconsideration of a pair of joint rulemakings that established a coordinated program to address GHG emissions from light-duty vehicles. NHTSA established corporate average fuel economy (CAFE) standards and EPA established GHG emissions standards for model years (MY) 2017-2025. *See 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards*, 77 *Fed. Reg.* 62,624 (Oct. 15, 2012)(Final Rule). Given NHTSA's

obligation to conduct a *de novo* rulemaking in order to establish final standards for MY 2022-2025, the Agencies committed to conduct a comprehensive mid-term evaluation, which was to be completed by April 1, 2018. *See id.* at 62,652. In the first step of this mid-term evaluation, EPA and NHTSA issued a Notice of Availability that included a draft Technical Assessment Report (TAR). *See Notice of Availability of Midterm Evaluation Draft Technical Assessment Report for Model Year 2022-2025 Light Duty Vehicle GHG Emissions and CAFE Standards*, 81 *Fed. Reg.* 49,217 (July 27, 2016). In the second step of the EPA mid-term evaluation, EPA made a proposed determination for the mid-term evaluation, *Proposed Determination on the Appropriateness of the Model Year 2022-2025 Light Duty Vehicle Greenhouse Gas Emissions Standards*. *See* 81 *Fed. Reg.* 87,927 (Dec. 6, 2016). EPA then finalized this determination well in advance of the April 1, 2018 deadline with the Administrator signing a final determination of the Mid-Term Evaluation on January 12, 2017. *See* 82 *Fed. Reg.* 39,553.

EEI is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. In addition to our U.S. members, EEI has more than 60 international electric companies, with operations in more than 90 countries, as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

Driven by a number of factors—including customer demands, technology developments, and federal and state regulatory obligations—the electric sector is undergoing a transition of its generating fleet that will continue over the next decade and beyond. Concurrent with this

transition, EEI member companies are investing significant amounts of capital—more than 112 billion dollars in 2016 alone—to make the energy grid smarter, cleaner, more dynamic, more flexible, and more secure in order to integrate and deliver a balanced mix of resources from both central and distributed energy resources to customers. As part of a commitment to this cleaner energy future, EEI and our members are working to develop smart communities in order to provide customers with innovative solutions that can improve our communities and support our ability to bring the benefits of clean energy resources to communities everywhere. This commitment and the industry's infrastructure investments are additionally beneficial in that they provide domestic job opportunities. Safe, reliable, affordable and clean energy powers the economy, promotes national energy independence and enhances the lives of all Americans.

Many of EEI's members are actively involved in the development of the regulations, financial incentives and infrastructure needed to commercially deploy electric vehicles and plug-in hybrid electric vehicles (collectively, EVs).[1] Electric transportation is an important part of the portfolio of technologies and measures needed to reduce reliance on imported fuels, diversify our energy options and reduce GHG and other emissions. Smart transportation is one of the key elements of a smart community—electric vehicles for public and private transportation are efficient, affordable, and help communities better deploy clean energy resources—and smart transportation is electric.

[1] EEI member companies are involved in a range of regulatory proceedings regarding EVs and their deployment. As of now, there are 21 EEI member companies planning or operating 25 separate programs in 16 different states. These programs represent over $2 billion worth of investment in EV infrastructure and deployment.

Any Reconsideration of the Mid-Term Analysis Should Retain the Current Framework and Include Appropriately Increased Incentives for EVs

The current MY 2022-2025 standards provide needed incentives to manufacturers to produce and market high-efficiency and zero-emission battery electric vehicles, as well as higher efficiency plug-in electric vehicles. Electrification remains the best, most impactful and most cost-effective pathway to reducing emissions from the transportation sector and light duty vehicle manufacturers have made long-term product development decisions based on their understanding of these standards. Any significant change in course now could cause manufacturers to delay their implementation of vehicle electrification plans, and therefore delay the electrification of the transportation sector. This also fully applies to any move by the Agencies to reconsider standards for MY 2021.

As EPA and NHTSA move forward with their reconsideration of the final determination for the Mid-Term Evaluation, EEI continues to support standards that provide incentives for EVs. As the Agencies consider any potential changes to the standards—and to the extent that these changes retain the broader framework established by the series of rulemakings regulating GHGs from light duty vehicles—EPA should, at the least, continue the current incentives provided for EVs and should consider expanding incentives and credits for EVs and advanced vehicles for MY 2022-2025. These incentives and credits encourage manufacturers to continue investment in game-changing technologies such as electrification.

Further, the current federal tax credits—which are based on the number of advanced vehicles sold per manufacturer—likely will expire for most if not all vehicle manufacturers by 2022. Therefore, extending the incentives and credits that are part of the CAFE and GHG emissions

standards will help ensure the continued manufacture of these advanced vehicles after 2022. The Agencies also should consider including appropriate incentives for EV adoption as part of any harmonization between each rulemaking by the Agencies to create a streamlined program with which auto manufacturers can comply.

It is Inappropriate for the Agencies to Penalize EVs for Upstream Emissions in their Analysis; Any Upstream Analysis Should Be Full and Fair.

As EEI noted in its August 25, 2017, comments on NHTSA's Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for MY 2022-2025 CAFE Standards, *see Notice of Intent To Prepare An Environmental Impact Statement for Model Year 2022-2025 Corporate Average Fuel Economy Standards*, 82 *Fed. Reg.* 34,740 (July 26, 2017), any analysis of the environmental impacts of vehicle materials and technologies must recognize the environmental benefits of increased EV deployment. The NHTSA NOI states that "[s]imilar to past EIS practice, NHTSA plans to analyze environmental impacts related to fuel and energy use, emissions and their effects on climate change and the environment, air quality, natural resources, and the human environment. NHTSA will address life-cycle impacts consistent with its past EISs, by focusing on reviewing and summarizing findings from existing, credible scientific information evaluating the most significant environmental impacts from some of the fuels, materials, and technologies that may be used to comply with the Proposed Action and alternatives." 82 *Fed. Reg.* 34,743.

Increased deployment of EVs will increase fuel economy and reduce dependence on imported petroleum. Increased EV deployment also will reduce emissions of GHGs and criteria pollutants from the transportation sector. As power sector emissions have been reduced and are on a long-term trajectory toward further reductions, increased EV deployment, therefore, will not result in

increased overall GHG and criteria pollutant emissions. Specifically, the emissions intensity of the power generation fleet has significantly improved given the overall transition of the fleet—these reductions are more pronounced today than they were in 2011 and 2014. As of 2016, the electric sector had reduced its GHG emissions by 26 percent from 2005 levels, and the continued deployment of natural gas-based and renewable generation will only further this trend.[2] *See* U.S. Energy Information Administration, *Monthly Energy Review*, September 2017, available at https://www.eia.gov/totalenergy/data/monthly/pdf/mer.pdf. Additionally, between 1990 and 2016, emissions of nitrogen oxides were cut by 82 percent and sulfur dioxide emissions by 91 percent, during a period in which electricity use grew by 36 percent. The resulting reductions in GHG and criteria pollutant emissions from electricity generation will allow increased EV deployment to create even more environmental benefits, as the increased deployment of electric vehicles will utilize the lower emissions intensity power sources provided by the electric sector.[3]

However, should the Agencies analyze upstream emissions, that analysis should be full and fair—it should consider all vehicle and battery types and not single out EVs. Similarly, NHTSA's previous EIS asserted that the environmental impacts of the upstream production of an EV are higher than conventional vehicles, and EPA had stated in its proposal that it cannot and will not assess the life-cycle emissions of vehicle production for a variety of reasons, including because this raises complex accounting issues that go beyond vehicle testing and fuel cycle

[2] Further, projections made in recent years in EIA's *Annual Energy Outlook* point toward continuing improvements in carbon dioxide intensity, resulting in even greater benefits from electric vehicles. *See* EIA *Annual Energy Outlook* 2017, available at https://www.eia.gov/outlooks/aeo/pdf/0383(2017).pdf.

[3] *See* EPRI-NRDC, Environmental Assessment of a Full Electric Transportation Portfolio, https://www.epri.com/#/pages/product/3002006881/.

analyses. *See* EIS at 6-15, and 76 *Fed. Reg.* 75011, n.286. If EPA and NHTSA do not believe that emissions related to vehicle or fuel production can be appropriately accounted for in the context of the proposed standards, it would be unreasonable for NHTSA to discuss the life-cycle emissions of EV production, including battery production, in the forthcoming EIS.

EEI once again notes that NHTSA should reject the analytical framework used by EPA in assessing upstream emissions from electricity generation. EPA's analysis used outdated data that does not take into account regional differences in electricity generation and generally does not recognize the significant reductions in emissions achieved by the power sector.